REMARKS

STATUS OF CLAIMS

Claims 1, 7, 11, 13, 15, 16, 18, and 21-27 are pending in this case. Claims 1, 13, 21, 24, and 27 are independent.

In the pending Office Action, the Examiner rejected claims 21-27 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. In addition, the Examiner rejected claim 1 under 35 U.S.C. § 102(b) as being anticipated by Wells et al. (US Patent No. 4,655,177). The Examiner also rejected claims 21, 24, and 27 under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as being unpatentable over Wells et al. In addition, the Examiner rejected claims 7, 11, 13, 15, 16, 18, 22, 23, 25, and 26 as being unpatentable over Wells et al. in view of Nakamura (U.S. Patent No. 4,505,236).

REJECTION UNDER 112 FIRST PARAGRAPH

The Examiner asserts that claim language drawn to a pedestal having a substantially flat top surface adapted to "abut side surfaces of adjacent rocker arms," in claims 21, 24, and 27, is new matter. Applicants respectfully traverse this rejection. Applicants submit that support for this language may be found, among other places, in Fig. 3, element 7; Fig. 6, element 23; and paragraph [18] in the specification. Fig. 3 shows top surface 7 of rocker shaft pedestal 3. Fig. 6 shows a flat 23 of rocker shaft 14 abutting top surface 7, which is described in paragraph [18], "A flat 23, on the underside of the shaft 14 mates with the top surface 7 of the pedestal 3." In view of this disclosure, Applicants submit that claims 21-27 do not contain new matter and, therefore, the rejection under § 112 first paragraph should be withdrawn.

REJECTION OF CLAIMS 1, 21, 24, AND 27 UNDER 35 U.S.C. § 102(B)

Applicants respectfully traverse the rejection of claims 1, 21, 24, and 27 under 35 U.S.C. § 102(b) as being anticipated by Wells et al. because Wells et al. does not disclose all of the claimed subject matter of claims 1, 21, 24, and 27, such as, for example

> at least one integrally cast rocker shaft pedestal including a top surface, wherein [a] top deck is in a same plane as the top surface of the at least one rocker shaft pedestal; wherein the at least one rocker shaft pedestal includes a pair of opposed sidewalls adapted for correctly spacing adjacent rocker arms on each side of the pedestal

as recited in claim 1. (Emphasis added) The Examiner considers pedestal mount 24 in Wells et al. to be an integrally cast rocker shaft pedestal. However, Wells et al. discloses that "[e]ach rocker arm assembly 10 includes a two part pedestal 34, which further includes a base 36 and a retainer clamp 38 . . ." Col. 5, lines 34-36. As such, Wells et al. discloses a multi-piece rocker shaft pedestal.

The present disclosure seeks to, among other things, differentiate itself from such configurations. Paragraph [02] of Applicants' specification discusses U.S. Patent No. 4,628,875 (the '875 patent), which discloses a rocker shaft mounting assembly having separate pedestal mounts and associated caps for clamping onto a rocker shaft. As further discussed in paragraph [24], one advantage of an integrally cast rocker shaft pedestal is that it enables fewer components to be used in constructing the engine. Not only does Wells et al. disclose a separate pedestal mount and retainer clamp 38, Wells et al. also discloses an additional component, base 36. Therefore, while the present disclosure mentions that an object of the disclosed system is to reduce the number of components of the engine and that the '875 patent is an example of a multi-piece system compared to which, the disclosed system attempts to utilize fewer components,

Wells et al. discloses a multi-piece rocker shaft pedestal that includes **MORE** components than that of the '875 patent. As such, Wells et al. does not disclose at least one integrally cast rocker shaft pedestal in form or function.

However, even if the Examiner is justified in considering pedestal mount 24 to be an integrally cast rocker shaft pedestal -- a notion which Applicants dispute -- pedestal mount 24 does not include "a pair of opposed sidewalls adapted for correctly spacing adjacent rocker arms on each side of the pedestal," as recited in claim 1. It appears that the rocker arms in Wells et al. are spaced by two-part pedestal 34, and NOT by pedestal mount 24.

For the same reasons discussed above, Wells et al. also fails to disclose

> a cylinder head . . . comprising . . . at least one integrally cast rocker shaft pedestal, the pedestal comprising . . . opposed outer side walls having substantially flat portions adapted to abut side surfaces of adjacent rocker arms of the rocker shaft assembly to position the rocker arms

as recited in claim 21 (Emphasis added) and

> a cylinder head . . . comprising . . . at least one integrally cast rocker shaft pedestal, the pedestal comprising . . . a substantially flat top surface adapted to abut a flat of a rocker shaft assembly; and opposed outer side walls having substantially flat portions adapted to abut side surfaces of adjacent rocker arms of the rocker shaft assembly to position the rocker arms, wherein the top surface of the pedestal is in the same plane as the top deck.

as recited in claim 27. (Emphasis added)

Further, Wells et al. does not disclose

> a cylinder head . . . comprising . . . at least one rocker shaft pedestal, the pedestal comprising . . . a substantially flat top surface adapted to abut a flat of a rocker shaft assembly; and opposed outer side walls having substantially flat portions adapted to abut side surfaces of adjacent rocker arms of the rocker shaft assembly to position the rocker arms

as recited in claim 24. (Emphasis added) Again, the Examiner alleges that pedestal mount 24 meets the limitation of a rocker shaft pedestal having a "substantially flat top surface," as required by claim 24. Again, as discussed above, Applicants submit that pedestal mount 24 does not meet the limitation of a rocker shaft pedestal as claimed. However, as discussed above, if one were to consider pedestal mount 24 to meet the limitation of a rocker shaft pedestal -- a notion which Applicants dispute -- pedestal mount 24 does not include "opposed outer side walls having substantially flat portions adapted to abut side surfaces of adjacent rocker arms," as required by claim 24.

In view of these arguments, the rejection of claims 1, 21, 24, and 27 under 35 U.S.C. § 102(b) should be withdrawn.

REJECTION OF CLAIMS 21, 24, AND 27 UNDER 35 U.S.C. § 103(A)

Applicants respectfully traverse the rejection of claims 21, 24, and 27 under 35 U.S.C. 103(a) as being unpatentable over Wells et al. in view of Nakamura. To establish prima facie obviousness under 35 U.S.C. § 103(a), the Examiner must show first that the prior art references teach or suggest all the claim limitations. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Second, the Examiner must show that there is some suggestion or motivation, either in the references or in the knowledge generally available to one of ordinary skill in the art, to modify or combine the references in a manner resulting in the claimed invention. In re Rouffet, 149 F.3d 1350, 47 USPQ2d 1453 (Fed. Cir. 1998). Third, the Examiner must show that there is a reasonable expectation of success to modify or combine. In re Dow Chem. Co., 837 F.2d 469, 473, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988). Moreover, "[b]oth the suggestion and the reasonable expectation of success must be found in the prior art

reference, not in the Applicant's disclosure." In re Vaeck, 947 F.2d 488, 493, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991).

Regarding Wells et al., the Examiner alleges that

> it would have been obvious . . . to have utilized the said flat portions of the pedestal to abut side surfaces of the adjacent rocker arms, since the use would provide a more compact engine, with properly aligned rocker arms.

Office Action at 4. However, as discussed above, Wells et al. does not disclose or suggest that pedestal mount 24, which the Examiner considers to meet the claimed limitation of a rocker shaft pedestal, includes "opposed outer side walls having substantially flat portions adapted to abut side surfaces of adjacent rocker arms," as recited in claims 21, 24, and 27. Further, there is no suggestion or motivation to modify Wells et al. in the manner proposed by the Examiner. Accordingly, the rejection of claims 21, 24, and 27 under 35 U.S.C. § 103(a) should also be withdrawn.

REJECTION OF CLAIMS 7, 11, 13, 15, 16, 18, 22, 23, 25, AND 26 UNDER 35 U.S.C. § 103(A)

Applicants respectfully traverse the rejection of claims 7, 11, 13, 15, 16, 18, 22, 23, 25, and 26 under 35 U.S.C. 103(a) as being unpatentable over Wells et al. in view of Nakamura. As discussed above, Wells et al. does not disclose or suggest all the claimed subject matter of claims 1, 21, 24, and 27. The Examiner acknowledged that "Wells . . . fails to disclose [that] the rocker shaft includes at least one flat formed on an underside of the shaft adapted for mating with a top of the at least one rocker shaft pedestal." Office Action at 4-5. The Examiner, however, pointing to Fig. 7, elements 98, 128, and 130, alleges that Nakamura discloses such a feature. Id. The Examiner further alleges that

> it would have been obvious to . . . have utilized the flat mating surface on the rocker shaft . . . as taught by Nakamura, to modify the mating geometric relations between the rocker shaft and the rocker shaft pedestal in the Wells device, since the use thereof would provide a more compact engine with a proper alignment on the rocker arms.

Office Action at 5. Applicants respectfully submit that it would not have been obvious to make such a combination because the configurations of Nakamura and Wells et al. are significantly different. For example, Wells et al. teaches a design which, as discussed above, includes curved, clamping elements that are not integral with the cylinder head. The clamping elements are curved to clamp around the rocker shaft, thus allowing it to rotate. In contrast, Nakamura teaches a design wherein the rocker shaft includes flats, which allow the shaft to be fixedly fastened to the cylinder head, in a non-rotatable manner. Therefore, one would not have been motivated to add the flats of Nakamura to the rocker shaft of Wells et al. because flats which mate to a cylinder head, thereby rendering the rocker shaft non-rotatable, would prevent the rocker shaft of Wells et al. from rotating as intended.

The Examiner also acknowledges that Wells et al. does not disclose "each sidewall having a spacing step adjacent a top of the pedestal, which spacing steps are adapted for correctly spacing adjacent rocker arms on each side of the pedestal, in which each sidewall includes a second step formed beneath the spacing step." Office Action at 5 and 6. The Examiner alleges that Nakamura teaches

> that it is conventional in the engine rocker shaft support art, to utilize a rocker shaft (128) [having] at least one flat formed on an underside of the shaft adapted for mating with a top of the at least one rocker shaft supporting member (98), in which the at least one rocker shaft supporting member includes a pair of opposed sidewalls, each sidewall having a spacing step adjacent a top of the supporting member, which spacing steps are adapted for correctly spacing adjacent rocker arms (130) on each side of the supporting member, in

> which each sidewall includes a second step formed beneath the spacing step (See Fig. 7).

Office Action at 5. The Examiner asserts that including these alleged features of Nakamura would have been obvious

> to modify the mating geometric relations between the rocker shaft and the rocker shaft pedestal, to include a spacing step and a second step on each opposed sidewalls in the Wells device, since the use thereof would provide a more compact engine with a proper alignment on the rocker arms.

Office Action at 6. However, contrary to the Examiner's allegation, Nakamura does not disclose at least one rocker shaft pedestal including "a pair of opposed sidewalls, each sidewall having a spacing step adjacent a top of the pedestal, which spacing steps are adapted for correctly spacing adjacent rocker arms on each side of the pedestal," as recited in claim 7. Instead, Nakamura discloses rocker arms (130) each straddled by two supporting member leg portions (102a/102b, 104a/104b), rather than each supporting member leg portion straddled by two rocker arms. Further, even if Nakamura did disclose all the features lacking in Wells et al. --a notion which applicants dispute--, the Office Action does not provide a proper motivation for combining the teachings of Nakamura with those of Wells et al., as neither Nakamura, nor Wells et al., nor anything else discloses or suggests combining these references in the manner suggested by the Examiner.

Therefore, the essential criteria for establishing a prima facie case of obviousness is lacking. For at least the foregoing reasons, the § 103(a) rejection of claims 7, 11, 13, 15, 16, 18, 22, 23, 25, and 26 under 35 U.S.C. § 103(a), based on Wells et al. and Nakamura, should be withdrawn.

CONCLUSION

In view of the discussion above, each of independent claims 1, 13, 21, 24, and 27 are allowable. Dependent claims 7, 11, 15, 16, 18, 22, 23, 25, and 26 each depend from one of claims 1, 13, 21, 24, and 27 and are, therefore, allowable for at least the same reasons that the respective claims from which they depend are allowable.

The Office Action contains characterizations and conclusions regarding the related art and Applicant's claims with which Applicant does not necessarily agree. Unless expressly noted otherwise, Applicant declines to subscribe to any such characterizations and conclusions.

In view of the foregoing remarks, Applicants submit that this claimed invention, as amended, is neither anticipated nor rendered obvious in view of the prior art references cited against this application. Applicants therefore request the Examiner's reconsideration and reexamination of the application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

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By: _____
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